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10/616,374	07/09/2003	Garry Parkinson Isaacs		1304

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140 Bull Run Rd.
Branson, MO 65616

EXAMINER

LAWRENCE JR, FRANK M

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,374

Applicant(s)

ISAACS, GARRY PARKINSON

Examiner

Frank M. Lawrence

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-11 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Claims 1-11 are all indefinite because they recite a "device and process". U.S. Patent practice limits a claim to either an apparatus defined by structural limitations, or a process defined by method steps. For example, claim 1 can be to an apparatus by reciting "a filterless air purifying and vacuum cleaning device, comprising: a powered impeller with multiple paddles or vanes for substantially atomizing fluid droplets simultaneously with transferring air," or to a process by reciting "a filterless air purifying and vacuum cleaning device, comprising: *providing* a powered impeller with multiple paddles..." Alternatively, a cleaning process can be claimed, such as "a filterless air purifying and vacuum cleaning process, comprising substantially atomizing fluid droplets simultaneously with transferring air using a powered impeller with multiple paddles or vanes." Each of the claims must be amended to recite either a process or apparatus. For examination, claims 1-8 are interpreted to be apparatus claims, while claims 9-11

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are method claims. It is noted that all of the claims could be interpreted to be either a process or apparatus.

3. Claims 1-9 are also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Each of claims 1-9 must be amended to form a complete sentence ending with a period.

4. Claims 2 and 3 each recite the limitation "the impeller" in line 2. There is insufficient antecedent basis for this limitation in the claims. The phrase "the impeller" can be changed to "an impeller" to overcome this rejection.

5. Claim 7 recites the limitation "said impeller and housing" in line 4. There is insufficient antecedent basis for this limitation in the claim. The phrase "said impeller and housing" can be changed to "an impeller and housing" to overcome this rejection.

6. Claim 10 recites the limitation "said suction means" in line 3. There is insufficient antecedent basis for this limitation in the claim. The phrase "said suction means" can be changed to "a suction means" to overcome this rejection.

7. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Specification

8. The disclosure is objected to because of the following informalities: The patent number "4,469,49" to Tuovinen, listed on pages 1 and 3 of the specification, is not a valid patent number. The number should be changed to "4,469,493".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-4, 8, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese reference (JP 55-094614 A).

11. JP '614 teaches a filterless dust removal system, comprising a housing (1) for receiving a gas stream containing dust particles and liquid droplets through an orifice (4) in an inlet tube (5), a powered impeller having vanes (8) and enclosed upper and lower sides for atomizing the droplets with the incoming air, a drain (2) for discharging particle laden fluids, and a vacuum source (7) for proving the air flow (see figures, abstract).

12. Claims 1-5, 7-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kroll et al. (4,594,081).

13. Kroll et al. '081 teach gas scrubber system, comprising a housing for receiving a gas stream containing particles through an inlet tube (14), a powered impeller having vanes (20), a tube (18) with a number of orifices (21) for introducing water into the impeller, a wall (6) enclosing the impeller, a demister (30) in a chamber downstream of the impeller with an inlet and outlet, drains (31, 34) for discharging particle laden fluids, and an outlet (16) that can be

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attached to a vacuum source, wherein the rotating impeller blades atomize the water droplets simultaneously with transferring air, impacting them on the wall (6) (see figures, col. 1, line 63 to col. 2, line 17, col. 3, line 62 to col. 5, line 67).

14. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Mignot (4,746,336).

15. Mignot '336 teaches a gas filtration unit having a vacuum head with a filter screen (30) to trap large objects, allowing smaller particles to pass into a non-filtering air purifying unit (see figure 1).

16. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Gen (6,613,129).

17. Gen '129 teaches a vacuum cleaner having a vacuum head with a filter screen (7) to trap large objects, allowing smaller particles to pass into a cycling air purifying unit (8) (see figures 2, 5).

Allowable Subject Matter

18. Claim 6 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

19. The following claim drafted by the examiner and considered to distinguish patentably over the art of record in this application, is presented to applicant for consideration:

Claim 6: A filterless air purifying and vacuum cleaning device, comprising a powered impeller with multiple paddles or vanes for substantially atomizing fluid droplets simultaneously with transferring air, a tube with an orifice to introduce fluid into the impeller, and an impeller housing having multiple narrowed low pressure zones to reduce fluid surface tension whereby dry particles become substantially wetted and discharged.

Applicant is invited to contact the examiner at the number listed below to discuss the application. Many, if not all of the rejections listed above can be corrected by an examiner's amendment if they put the application in condition for allowance.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form were either cited by applicant in the instant specification, or are cited by the examiner for disclosing air treatment devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence
Primary Examiner
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Frank Lawrence 11-22-04

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